



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590
OCT 22 2002

DOT-E 8820
(FIFTH REVISION)

EXPIRATION DATE: September 30, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Arbel-Fauvet-Rail (AFR), Paris, France
(U.S. Agent: Mary Hoyt-Joyce
Chevy Chase, Maryland)

(See Appendix A to this document for a list of additional grantees and expiration dates)

2. PURPOSE AND LIMITATION:

a. This exemption authorizes the transportation in commerce of certain Division 2.2 material in non-DOT Specification IMO TYPE 5 portable tanks. This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.

b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.

3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR § 173.315 except as specified herein.
5. BASIS: This exemption is based on the application of Arbel-Fauvet-Rail dated September 12, 2002, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Materials Description	Hazard Class/ Division	Identi- fication Number	Packing Group
Bromotrifluoromethane or Refrigerant gas, R13B1	2.2	UN1009	N/A
Chlorodifluoromethane or Refrigerant gas, R22	2.2	UN1018	N/A
Chlorodifluoromethane and Chloropentafluoroethane mixture or Refrigerant gas, R 502, with fixed boiling point, with approximately 49 percent chlorodifluoromethane	2.2	UN1973	N/A
Chlorodifluorobromomethane or Refrigerant gas, R12B1	2.2	UN1974	N/A
1, 1, 1, 2-Tetrafluoroethane or Refrigerant gas R134a	2.2	UN3159	N/A

7. SAFETY CONTROL MEASURES:

a. PACKAGING - Prescribed packagings are non-DOT specification portable tanks, mounted in ISO frames, designed and constructed in accordance with Fauvet-Girel drawings Co 167053, Co 167012 Rev. A, other drawings, technical specifications and calculations on file with the OHMEA, and in conformance with the following:

- (1) Code--Complies with ASME Code (not Code stamped); IMO Type 5.
- (2) Insulation--None
- (3) Water Capacity (U.S. Gallons)--3,698

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(4) Material--French steel standard NFA 36205,
designation A 52 FP (Carbon Steel); Yield strength
- 54,390 psi; Tensile strength - 81,222 psi

(5) Tank Size (inches) (outside dia.) X (length) X (thickness)
74.80 220.866 0.834
(after forming)
Head Thickness--0.837 (after forming)

Weld Joint Efficiency--1.0
Corrosion Allowance--0.0
Number of Baffles--2

(6) Design Pressure (PSIG)--395.66
Note: Design pressure means "Maximum allowable
working pressure (MAWP)" as used in the ASME Code.

(7) Test Pressure, Minimum (PSIG)--684.57

(8) Openings--One(1), 18 inch diameter manhole on
the rear head; one(1), inspection opening on the
front head; one(1), safety relief device pad on top;
one(1), liquid phase outlet and one (1) gas phase
outlet on the bottom. Note: Each bottom outlet
valve must be provided with a shear section that
meets the requirements of § 178.337-12.

(9) Tank surface area (square feet)--380

(10) Pressure Relief Devices--Two (2), 2.5 inch
diameter spring loaded safety relief valve outboard
of and in series with one (1) 3.0 inch diameter
rupture disc all set at 435 psig. Total relief
device capacity is 1,671,090 SCFH.

(11) G-Loadings: Vertical down 3; Vertical up 1;
Longitudinal 2; and Transverse 1.

(12) Maximum Gross Weight (pounds)--55,000

(13) Maximum Commodity Weight (pounds)--36,040

(14) Tare Weight (pounds)--18,960

(15) Design Specific Gravity--1.17

(16) Design Temperature (°F)--122

b. TESTING -

1. Hydrostatic test certificates for each tank must be maintained by the owner or manufacturer at its principal business office and be made available to any representative of the DOT upon request.

2. A test report documenting a satisfactory ISO prototype frame test for this tank design must be on file with the OHMEA prior to the first shipment.

3. Each tank must be (i) visually inspected prior to each trip to insure that it has not been damaged on the previous trip; and (ii) be retested and reinspected in accordance with the provisions of § 173.32b except the use of an approval agency is not required.

c. OPERATIONAL CONTROLS -

1. Each portable tank must be plainly marked on both sides near the middle, in letters at least two inches high on a contrasting background, "DOT-E 8820".

2. No product may be shipped that has venting requirements exceeding 1,671,090 SCFH. The venting capacity required for each product must be determined by the flow formulas contained in Compressed Gas Association(CGA) pamphlet S-1.2.

3. The tank must be filled in accordance with the provisions of § 173.315.

4. "DOT-E 8820" must replace the "DOT-51" specification marking and be stamped on the metal manufacturer's data plate on the line which reads "D.O.T. Specification No.".

5. The internal valves on the liquid and vapor discharge openings must be provided with remote means of automatic closure, both mechanical and

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thermal, that are installed at the ends of the tank in at least two, diagonally opposite locations. If the discharge connection at the tank is not in the general vicinity of one of the two locations specified above, one additional fusible element must be installed so that heat from a fire in that area will activate the emergency control system. Fusible elements may not have a melting point exceeding 250°F.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption who receives a package covered by this exemption may reoffer it for transportation provided no modifications or changes are made to the package and it is reoffered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, cargo vessel.

10. MODAL REQUIREMENTS:

a. A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.

b. Portable tanks may not be transported in container-on-flat car (COFC) or trailer-on-flat car (TOFC) service except under conditions approved by the Associate Administrator for Safety, Federal Railroad Administration.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, 49 CFR Parts 171-180.
- o Registration required by § 107.601 et seq., when applicable.

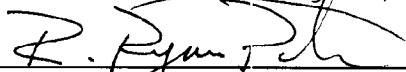
Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS:

- a. The holder of this exemption, as identified in paragraph 1 above, must contact the OHMEA immediately after any of the tanks covered by this exemption are sold to another party.
- b. The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder(s) of this exemption must inform the AAHMS, in writing, of any incident involving the package and shipments made under the terms of this exemption.

Issued in Washington, D.C.:



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for
Hazardous Materials Safety, Research and Special Programs
Administration, Department of Transportation, Washington, D.C.
20590. Attention: DHM-31.

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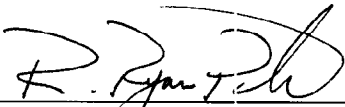
Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: sdc

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The following are hereby granted party status to this exemption based on their application(s) submitted in accordance with §§ 107.107 or 107.109, as appropriate:

Company Name City/State	Application Date	Issue Date	Expiration Date
Compagnie des Containers Reservoirs, (C.C.R.) Paris France, (U.S. Agent: ERMEWA, Inc. Houston, Texas) (Former Grantee: Eremtainer)	Sep 12, 2002	OCT 22 2002	Sep 30, 2004



Fr Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety